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# **WATER SUPPLY OUTLOOK FOR UTAH**

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MAR 3 - 1967

CURRENT SERIAL RECORDS

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE---SOIL CONSERVATION SERVICE,  
and  
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,  
Utah Fish and Game Dept., Utah Agricultural Experiment Station,  
U.S. National Park Service, U.S. Geological Survey; and other  
Federal, State, and private organizations.

AS OF  
FEB. 1, 1967

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

### PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





WATER SUPPLY OUTLOOK  
and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS  
for  
UTAH

FEBRUARY 1, 1967

*Report prepared by*

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SALT LAKE CITY, UTAH



# PROSPECTIVE WATER SUPPLIES

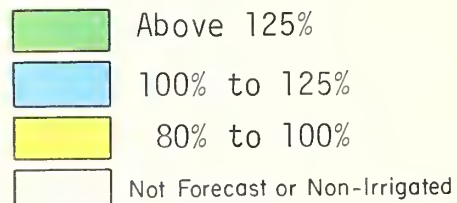
Based on Snow Surveys Made on  
UTAH and BEAR RIVER WATERSHEDS

February 1, 1967

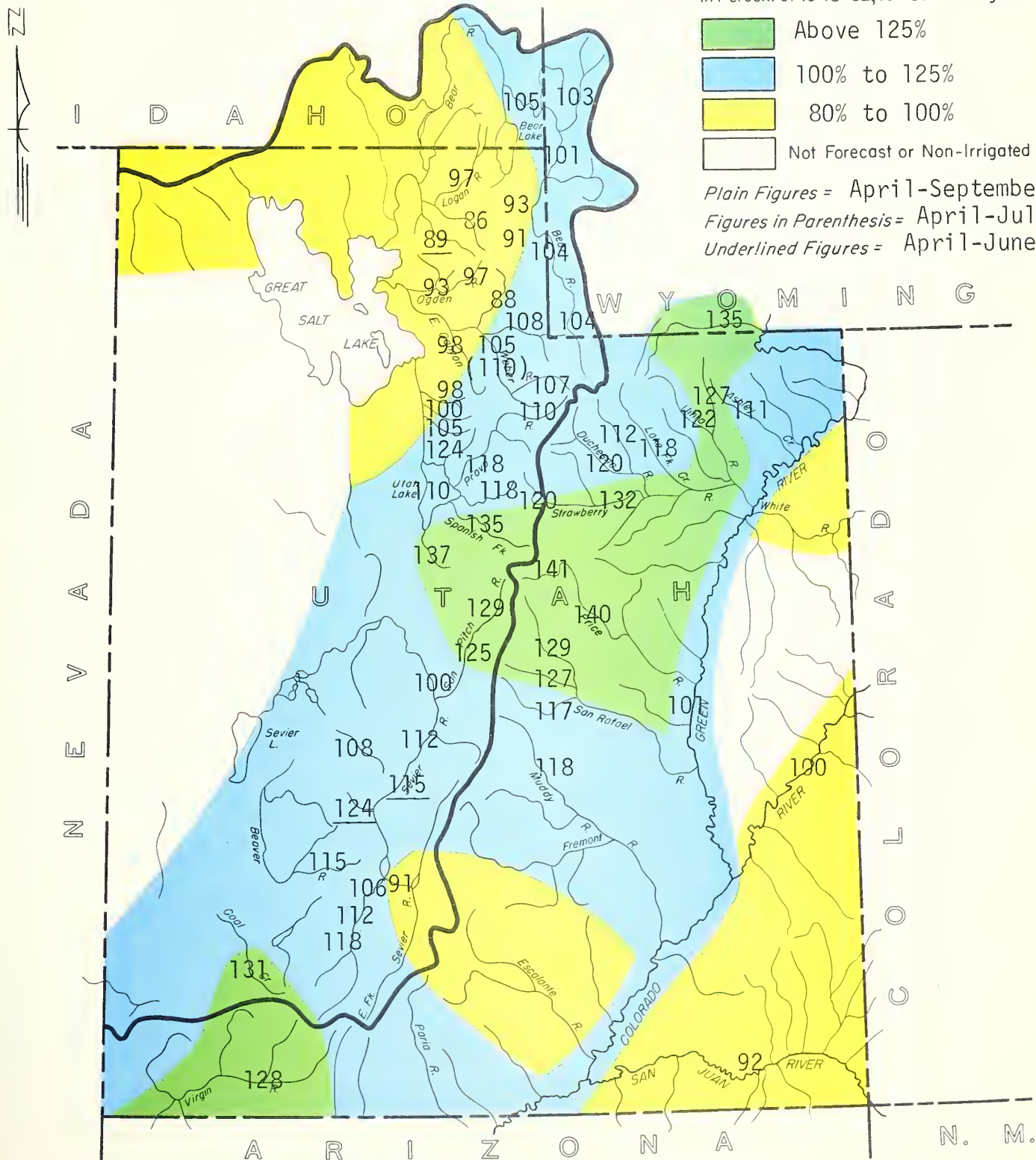
Approximate Date



FORECAST STREAM FLOW  
in Percent of 1948-62, 15 Year Average



Plain Figures = April-September  
Figures in Parenthesis = April-July  
Underlined Figures = April-June



Lake Powell Inflow = (101%)  
Flaming Gorge Inflow = (102%)





# WATER SUPPLY OUTLOOK

as of

FEBRUARY 4, 1967

\* \* \* \* \*

\* Considering current streamflow prospects and carry- \*

\* over reservoir storage supplies, the outlook for \*

\* next summer's water supply remains fairly good to \*

\* excellent throughout most of the state. \*

\* \* \* \* \*

Although the overall water outlook is very favorable, there are a few smaller areas in the state where the picture is not quite so bright. Only fair supplies are expected from watersheds near Tooele, in southern Wayne county, the Escalante river and Antimony Creek in Garfield county. Here, about 15% to 20% less than average streamflow is expected. If a warm, dry period should occur for any length of time during the next few months, people living in these areas would experience some water shortages.

The weather over the State during January showed little change from the average pattern of previous months. Temperatures averaged a little above normal except in the Uintah Basin. Largest amounts of precipitation were reported in Utah and Wasatch counties (up to 200% of normal) with an area above 150% of normal extending eastward across the Uintah mountains. From the Ogden river northward, precipitation was near to slightly below normal. Similar conditions existed over the Sevier and Virgin River Basins, but the southeast portion of the State continued very dry.

An especially bright water picture is in prospect for people living in Carbon, Emery and Sanpete counties, and for those served by the Spanish Fork, Strawberry, Whiterocks and Virgin Rivers, smaller streams coming from Mt. Nebo in the Payson to Nephi area, and Coal Creek near Cedar City. These streams are expected to yield from 25% to 50% more than their usual amounts.

Prospects are also good to excellent for areas served by the following streams, where about 10% to 25% above average runoff is anticipated. These streams include the American Fork river, inflow to Strawberry reservoir and Utah Lake, Provo river, northern Uintah Basin streams from the Duchesne to Uinta rivers, Ashley and Brush Creeks. In southern Utah it includes the Sevier river system south of Gunnison (but excluding the East Fork Sevier), the Beaver river, the main Fremont and Muddy rivers.

Next summer's streamflow is expected to be from about 85% to average amounts for streams in Cache, Rich, Weber and Morgan counties, and for the East Fork Sevier river. Average to 10% above average is forecast for the streams of Salt Lake county, the upper Weber (above Echo), inflow to Sevier Bridge reservoir and streams near Fillmore.



## WATER SUPPLY OUTLOOK (continued)

Runoff during January was about average over the State during the month. However, it was above average in parts of northern Utah and the extreme south, due in part to the warm weather and some carryover effects of the flood producing storms in southern Utah during December.

Total storage in the principal reservoirs of Utah remained above average. The gain during January of over 22,000 acre feet in the three major reservoirs of the Sevier River System was also a gain of 2% compared to the 1948-62 average.



# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	THIS YEAR AS PERCENT OF AVERAGE	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>
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## BEAR RIVER SYSTEM

Bear at Harer, Idaho	270	105	Apr-Sept	208	258
Bear nr Randolph	95	101	Apr-Sept		94
Bear nr Ut-Wyo State Line	120	104	Apr-Sept	91	115
Bear nr Woodruff	122	104	Apr-Sept	72	117
Big Crk nr Randolph, Utah	8	93	Apr-Sept		8.6*
Blacksmith Fork nr Hyrum	54	86	Apr-Sept	47	63
Little Bear nr Paradise	34	89	Apr-June	21	38
Logan nr Logan (1)	129	97	Apr-Sept	101	133
Smith's Fork nr Border, Wyoming	115	103	Apr-Sept	77	112
Woodruff Crk nr Woodruff, Utah	16	91	Apr-Sept		17.6*

## WEBER-OGDEN RIVERS

Chalk Crk at Coalville	39	108	Apr-Sept	28	36
East Canyon Crk nr Morgan (2)	25	98	Apr-Sept	15.7	25.6
Lost Crk nr Croydon, Utah	16	88	Apr-Sept	12.9	18.1
Pineview Reservoir Inflow (3)	120	93	Mar-July	102	129
So Fork Ogden nr Huntsville	60	97	Apr-Sept	50	62
Rockport Reservoir Inflow (4)	129	110	Apr-July	94	117*
Weber nr Coalville (5)	135	105	Apr-Sept	95	128
Weber nr Oakley	108	108	Apr-June	88	100
	132	107	Apr-Sept	105	123

## PROVO RIVER & UTAH LAKE

American Fork nr American Fork	41	124	Apr-Sept	27	33
Hobble Crk nr Springville	25	118	Apr-Sept		21.2
Payson Creek nr Payson	10	137	Apr-Sept	- -	7.3
Provo nr Hailstone (6)	120	110	Apr-Sept	74	109
Provo below Deer Crk Dam (7)	159	118	Apr-Sept		135
Spanish Fork at Thistle	54	135	Apr-Sept		40
Strawberry Reservoir Inflow (8)	60	120	Apr-Sept	33	50
Utah Lake Inflow	310	110	Apr-Sept	176	282

## JORDAN RIVER & SALT LAKE

Big Cottonwood nr SLC	39	100	Apr-Sept	28	39
Little Cottonwood Crk nr SLC	40	105	Apr-Sept	29	38
Parley's Crk nr SLC	13	98	Apr-Sept	9.7	13.3

(1) Includes U.P. & L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (2) Observed flow plus change in storage in East Canyon Reservoir. (3) Inflow record as computed by U.S. Bureau of Reclamation. (4) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (5) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (6) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (7) Observed flow plus change in storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal. (8) Change in storage plus diversion thru Strawberry tunnel.





# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	THIS YEAR AS PERCENT OF AVERAGE	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>
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## SEVIER RIVER

Chalk Creek nr Fillmore	18	108	Apr-Sept	10.3	16.7
Clear Crk nr Sevier (abv. Div.)	16	124	Apr-June		12.9*
East Fork Sevier nr Kingston (9)	14	89	Apr-June		15.8
	18	91	Apr-Sept	4.8	19.8
Inflow					
Kingston to Vermillion Dam	45	115	Apr-June	22.8	39
Vermillion Dam to Gunnison	66	112	Mar-June	47	59
Salina Crk at Salina (10)	14	169	Apr-June	1.4	8.3*
Sevier nr Circleville	45	112	Apr-Sept	37	40 *
Sevier nr Gunnison	55	100	Apr-Sept	21	55
Sevier at Hatch	36	113	Apr-June	35	32
	53	118	Apr-Sept	47	45
Sevier nr Kingston	23	110	Apr-June	15.0	21.0
	27	106	Apr-Sept	16.3	25.5
Sevier below Piute Dam (11)	45	100	Apr-Sept		45

## SAN PITCH RIVER

Ephraim Creek nr Ephraim	19	125	Apr-Sept	- -	15.2
Pleasant Crk nr Mt. Pleasant	12.5	129	Apr-Sept		9.7*
Twin Crk nr Mt. Pleasant	6.1	130	Apr-Sept		4.7*

## BEAVER RIVER

Beaver nr Beaver	22	122	Apr-June	12.0	18.0
	28	115	Apr-Sept	15.1	24.3
Rockyford Reservoir Inflow (12)	6	78	Apr-June	1.4	7.8

## COAL CREEK

Coal Crk nr Cedar City	21	131	Apr-Sept	16.4	16.0
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## COLORADO RIVER BASIN

### GREEN RIVER TRIBUTARIES IN UTAH

### FLAMING GORGE TO DUCHESNE RIVER

Ashley Creek nr Vernal	62	111	Apr-Sept	48	56
Henry's Fork at Linwood	46	135	Apr-Sept		34

(9) Observed flow plus change in storage in Otter Creek Reservoir. (10) Gage is below diversions near Salina.  
 (11) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (12) Observed flow at Rockyford Dam,  
 corrected for change in storage in Rockyford Reservoir.



# UTAH STREAMFLOW FORECASTS <sup>a</sup> ( 1,000 Ac. Ft. )

FORECAST POINT	FORECAST THIS YEAR	THIS YEAR AS PERCENT OF AVERAGE	FORECAST PERIOD	LAST YEAR	AVERAGE <sup>b</sup>
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## DUCHESNE RIVER

Duchesne at Provo River (Trail nr Hanna)	46	131	Apr-Sept	- -	35*
Duchesne nr Tabiona (13)	137	120	Apr-Sept		114
Lakefork below Moon Lake (14)	85	118	Apr-Sept	69	72
Rock Crk nr Mtn. Home	114	112	Apr-Sept	77	102
Strawberry at Duchesne	95	132	Apr-Sept	53	72
Uinta nr Neola	116	122	Apr-Sept	94	95
Whiterocks nr Whiterocks	80	127	Apr-Sept	60	63
Yellowstone nr Altonah	84	115	Apr-Sept		73

## PRICE RIVER

Gooseberry Crk nr Scofield	16	134	Apr-Sept	8.4	11.9
Price nr Heiner (15)	95	140	Apr-Sept	44	68
Scofield Reservoir Inflow (15)	52	141	Apr-Sept	21.3	37

## SAN RAFAEL RIVER

Cottonwood Crk nr Orangeville	70	127	Apr-Sept	33	55
Ferron Crk nr Ferron	49	117	Apr-Sept		42
Huntington Crk nr Huntington	72	129	Apr-Sept	42	56

## MUDDY RIVER

Muddy Creek nr Emery	27	118	Apr-Sept	12.0	22.8*
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## VIRGIN RIVER

Virgin nr Virgin	55	128	Apr-June	39	43
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## UPPER COLORADO BASIN

Colorado nr Cisco, Utah (15)	3800	100	Apr-Sept	2148	3789
Flaming Gorge Inflow (3)	1150	102	Apr-July		1129
Lake Powell Inflow (3)	7800	101	Apr-July		7692
Green at Green River, Utah (15)	3400	101	Apr-Sept		3368
San Juan nr Bluff, Utah (15)	1075	92	Apr-Sept	1034	1172

(13) Observed flow plus diversion through Duchesne Tunnel. (14) Observed flow plus change in storage in Moon Lake Reservoir. (15) Observed flow plus change in storage reservoir.

### GENERAL FOOTNOTES

(a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1948-62, 15 year period. \*Partly estimated.





# RESERVOIR STORAGE ( 1,000 Ac. Ft. )

## GREAT BASIN

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED ( FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE <sup>a</sup>
<u>Bear River</u>	Bear Lake	1421.0	1059.0	1172.6	883.7
	Woodruff Narrows	26.5	15.5c	17.7	- -
<u>Beaver River</u>	Rocky Ford	23.3	7.6	11.9	10.7
<u>Little Bear</u>	Hyrum	15.3	10.3	10.6	10.1
	Porcupine	11.3	1.6c	2.5	- -
<u>Ogden</u>	Causey	7.1	0.2	1.1	- -
	Pineview	110.1	43.3	71.2	8.9
<u>Provo</u>	Deer Creek	149.7	86.0	111.9	91.4
<u>Sevier River</u>	Gunnison	18.2	3.4	- -	- -
	Otter Creek	52.5	14.0	26.4	23.3
	Piute	71.8	44.5	39.2	31.7
	Sevier Bridge	236.0	55.4	96.2	92.2
<u>Spanish Fork</u>	Strawberry	265.4	93.2	115.2	133.0
<u>Utah Lake</u>	Utah Lake	**883.9	593.4	696.5	595.6
<u>Weber</u>	East Canyon	48.1	13.4	2.2	12.4
	Echo	73.9	45.5	59.0	26.8
	Lost Creek	18.2	0.0		
	Rockport	60.9	13.6	48.1	15.1*
	Willard Bay	198.2	96.0	80.9	- -

## COLORADO RIVER DRAINAGE

<u>Ashley Creek</u>	Steinaker	33.3	22.2	19.1	- -
<u>Colorado</u>	Blue Mesa	940.8d	366.0	117.7	- -
	Lake Powell	27000.0d	7660.4	8804.0	---
<u>Green</u>	Flaming Gorge	3789.0d	2165.2	2414.3	- -
<u>Lake Fork</u>	Moon Lake	35.8	14.0c	31.2	13.0
<u>Price River</u>	Scofield	65.8	36.6	51.9	18.5
<u>San Rafael</u>	Joes Valley	54.6	1.9	- -	- -
<u>San Juan</u>	Navajo	1709.0d	397.4	283.6	- -

\* - Average for 1957-62 inclusive

\*\* - Taken at compromise point

All data contained in this table supplied by the U.S. Geological Survey.

(a) 1948-62 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated.

(\*) Total capacity reported.



# COMPARISON of SNOW COVER

RIVER, BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

## GREAT BASIN

Smith's Fork-Bear River(Wyo)	4	139	120
Mink Creek - Cub River	3	123	83
Logan River	5	104	93
Blacksmith Fork	6	114	91
Malad River (Idaho)	2	113	88
Ogden River	5	99	91
Weber River above Echo Dam	8	115	106
Chalk Creek - Coalville	2	99	112
East Canyon Creek	3	122	133
Farmington Creek	2	117	88
Salt Lake Area	4	124	101
Tooele Area	1	113	82
American Fork River	2	176	151
Provo River above Vivian Park	7	136	121
Strawberry Reservoir Valley	3	131	122
Spanish Fork River	4	174	126
Mt. Nebo Area	2	159	124
Sevier River above Panguitch	3	71	103
East Fork Sevier river	4	67	69
Salina Creek	2	181	118
Mt. Pleasant Area	2	117	130
Ephraim Creek	2	172	112
Beaver River	3	112	102
Coal Creek-Cedar City	3	72	114

## COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	5	132	128
Lakefork River	2	117	141
Whiterocks-Uintah Rivers	3	124	139
Price River	5	158	141
San Rafael Tributaries	6	135	127
Escalante River	3	68	68
Virgin River	4	74	108



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>(a)</sup>

## GREAT BASIN DRAINAGE

UPPER BEAR RIVER  
(Above Harer, Idaho)

Big Park	10G11	8700	1/28	47	13.1	11.2	10.3*
CCC Camp x	10G7	7500	1/30	32	8.4	5.4	7.8
Monte Cristo R.S.	11H12	8960	1/30	53	15.3	15.8	16.0*
Piney LaBarge x	10G10	8820	1/29	56	16.9	11.1	12.4*
Salt River Summit x	10G8	7900	1/30	41	11.2	8.5	10.2*
Trial Lake x	10J8	9800	1/30	68	19.1	14.6	16.5*

LOWER BEAR RIVER  
(Below Harer, Idaho)

Beaver Crk-Skunk Crk.x	11H14	7150	1/30	32	8.4	7.9	8.0*
Christensen Ranch	11G11	5600	1/30	22	5.0	5.1	6.4*
Cub River R.S.	11G12	5400	1/27	24	5.6	5.0	6.5*
Dry Basin A	11G13	7900	Delayed Report			18.2A	- -
Dry Bread Pond x	11H13	8230	1/30	42	11.8	12.2	11.3*
Dry Creek Flat	12G4	6350	1/30	17	4.3	4.0	4.7*
Emigrant Summit	11G6	7700	1/30	54	16.0	11.4	- -
Garden City Summit	11H7	7600	1/26	42	10.6	11.3	12.5*
Horseshoe Basin A	11G14	8000	Delayed Report			12.1A	- -
Klondike Narrows	11H1	7400	1/26	54	13.9	12.0	13.5*
Liberty Spring	11G15	8420	Delayed Report			18.5A	- -
Monte Cristo R.S.	11H12	8960	1/30	53	15.3	15.8	16.0*
Oxford Mountain	12G3	6800	1/30	22	5.2	4.4	6.2*
Steep Hollow #1	11H27	8500	1/26	83	23.0	21.2	23.0*
Steep Hollow #2	11H28	7700	1/26	68	18.0	15.6	17.5*
Strawberry Creek	11G9	5800	1/30	24	6.0	5.0	7.7*
Strawberry Mink Divide	11G10	6800	1/30	48	14.3	9.2	13.5*
Tony Grove R.S.	11H3	6250	1/26	27	6.1	7.1	8.4
Willow Flat	11G4	6100	1/27	35	8.5	7.8	9.7*

## OGDEN RIVER

Beaver Crk-Skunk Crk.	11H14	7150	1/30	32	8.4	7.9	8.0*
Ben Lomond(lower)	11H9	5850	1/27	32	6.5	6.7	10.7*
Ben Lomond Peak	11H8	8000	1/27	64	19.1	19.4	22.0*
Ben Lomond Trail	11H30	6000	1/27	35	8.2	8.3	- -
Cutler Creek	11H29	6780	1/27	59	15.5	13.2	- -
Dry Bread Pond	11H13	8230	1/30	42	11.8	12.2	11.3*
Monte Cristo R.S.	11H12	8960	1/30	53	15.3	15.8	16.0*
Sagebrush Flat	11H15	6300	1/30	13	3.4	3.8	4.2*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1948-62, 15 year average.





## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE <sup>a</sup>

WEBER RIVER

Beaver Creek R.S.	11J24	7500	1/30	28	6.6	4.9	6.2*
Chalk Creek #2	11J2	8000	1/27	44	10.7	9.7	8.5*
Chalk Creek #3	11J3	7500	1/27	25	4.6	5.2	4.7*
Farmington Canyon(lower)	11J12	6950	1/30	41	10.6	9.2	15.0*
Farmington Canyon(upper)	11J11	8000	1/30	63	17.6	14.6	16.8*
Lamb's Canyon x	11J14	6600	1/26	43	9.4	7.0	9.5*
Parley's Canyon Smt.	11J15	7500	1/28	44	10.9	8.4	11.6*
Silver Lake x	11J16	8725	1/27	63	17.0	16.5	16.0
Smith & Morehouse	11J4	7600	1/31	37	7.8	8.7	7.8*
Trial Lake x	10J8	9800	1/30	68	19.1	14.6	16.5*

PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	1/30	54	17.9	9.0	11.9
Clear Creek Ridge #2	11K22	8000	1/27	50	10.9	7.2	8.9*
Clear Creek Ridge #3	11K23	6600	1/27	35	7.0	3.1	5.2*
Daniels-Strawberry Smt.	11J23	8000	1/31	54	14.7	9.4	10.1
East Portal	11J7	7560	1/30	40	9.0	7.8	8.1
Payson R.S.	11K1	8050	1/26	58	14.6	10.2	10.5*
Rock Bridge	11K2	6750	1/26	38	8.6	4.9	7.8*
Soapstone R.S.	11J25	7800	1/30	37	9.8	6.9	8.0*
South Fork R.S.	11J19	6100	1/30	26	7.6	2.8	5.9
Strawberry Divide	11J8	8000	1/30	54	14.4	11.7	13.3
Timpanogos Cave Camp	11J18	5500	1/29	15	4.6	0.5	2.8
Timpanogos Divide	11J21	8140	1/30	85	26.8	17.5	17.6
Trial Lake	10J8	9800	1/30	68	19.1	14.6	16.5*

JORDAN RIVER & TOOELE VALLEY

Lamb's Canyon	11J14	6600	1/26	43	9.4	7.0	9.5*
Middle Canyon	12J3	7000	1/30	25	7.0	6.2	8.5*
Mill D South Fork	11J10	7400	1/27	55	12.7	10.0	12.0*
Parley's Canyon Smt. x	11J15	7500	1/28	44	10.9	8.4	11.6*
Silver Lake	11J16	8725	1/27	63	17.0	16.5	16.0

UPPER SEVIER RIVER(South of Richfield, Utah)

Big Flat x	12L7	10290	1/31	50	15.0	9.2	10.6*
Bryce Canyon	12M8	8000	1/30	15	2.7	4.3	3.8*
Duck Creek R.S.	12M4	8560	1/31	32	7.8	13.0	9.0*
Harris Flat R.S.	12M5	7700	1/31	19	4.8	6.2	5.7*
Long Valley Jct. x	12M6	7500	1/31	14	3.8	Trace	3.2*
Midway Valley	12M2	9800	1/30	63	17.4	19.9	12.5*
Widtsoe-Escalante Smt.	11M1	9500	1/27	16	3.5	5.5	5.1
Widtsoe-Escalante #2	11M2	9500	1/27	24	5.0	6.4	6.8*
Widtsoe-Escalante #3	11M3	9500	1/27	29	5.8	9.0	9.3*
Kimberly Mine	12L6	8900	1/30	33	8.9	- -	9.3*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1948-62, 15 year average.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE <sup>a</sup>

LOWER SEVIER RIVER  
(Including San Pitch River)

Farnsworth Lake	11L1	9900	1/30	39	11.6	5.8	9.5*
G.B.R.C. Headquarters	11K11	8700	2/1	38	10.2	5.3	9.0*
G.B.R.C. Meadows	11K10	10000	2/1	56	16.3	10.7	14.5*
Gooseberry R.S.	11L2	8400	1/30	23	6.8	4.2	5.9*
Gooseberry Reservoir x	11K4	8700	1/27	49	14.9	8.7	11.8*
Mammoth R.S.-Ctnwd. Crk.	11K3	8800	1/27	57	16.4	10.0	12.2*
Shingle Mill	12L11	6200	1/30	19	4.6	2.4	5.5*

BEAVER RIVER

Big Flat	12L7	10290	1/31	50	15.0	9.2	10.6*
Merchant's Valley	12L9	8200	1/26	23	3.8	5.7	5.8*
Otter Lake	12L8	9300	1/26	42	8.6	8.1	8.7*

COAL CREEK

CSU Ranch	12M17	8200	1/30	17	4.5	8.2	- -
Midway Valley x	12M2	9800	1/30	63	17.4	19.9	12.5*
Urie Flat	12M10	8450	1/30	18	3.9	6.8	4.7*
Webster Flat	12M3	9200	1/30	46	11.8	16.7	9.8*

PAROWAN CREEK

Birch Crossing	12M16	8100	1/27	16	3.0	3.7	- -
Brian Head	12M14	10400	1/27	50	10.5	13.5	- -
Ed Ward Flat	12M12	8300	No Report			5.1	- -
Tall Poles	12M15	8800	1/27	34	6.9	8.2	- -
Yankee Reservoir	12M11	8700	No Report			6.3	- -

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH  
(Tributaries above Flaming Gorge)

Buck Pasture A	10J23	9700	Delayed Reading			- -	- -
Henry's Fork A	10J24	10200	Delayed Reading			- -	- -
Steel Creek Park A	10J20	9900	Delayed Reading			- -	- -

DUCHESNE RIVER

Ashley Twin Lakes A	9J11	10500	Delayed Reading			- -	- -
Atwood Basin A	10J27	10250	Delayed Reading			- -	- -
Chepeta-Whiterocks Lks. A	9J9	10300	Delayed Reading			10.5	- -
Daniels-Strawberry Smt. x	11J23	8000	1/31	54	14.7	9.4	10.1
East Portal x	11J7	7560	1/30	40	9.0	7.8	8.1
Five Point Lake A	10J26	11000	Delayed Reading			- -	- -
Indian Canyon	10K1	9100	1/30	47	11.9	10.2	8.2
Julius Park	9J6	9800	1/27	55	12.2	9.2	8.9*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1948-62, 15 year average.





# SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>a</sup>

## DUCHESNE RIVER - Continued

Lakefork Basin A	10J25	11100	Delayed Reading			- -	- -
Lakefork Mountain	10J10	10500	1/25	48	8.9	8.3	7.3*
Lakefork Mountain #2	10J11	8900	1/25	44	8.3	6.5	5.2*
Lakefork Mountain #3	10J12	8100	1/25	39	7.3	5.5	4.2*
Mosby Mountain	9J5	9500	1/27	44	9.8	8.1	6.8*
Paradise Park	9J3	10100	1/27	50	11.5	9.7	8.4*
Reynolds Park A	9J10	10400	Delayed Reading			- -	- -
Soapstone R.S. x	11J25	7800	1/30	37	9.8	6.9	8.0*
Strawberry Divide	11J8	8000	1/30	54	14.4	11.7	13.3
Trial Lake	10J8	9800	1/30	68	19.1	14.6	16.5*
Windy Park A	9J12	9400	Delayed Reading			- -	- -

## PRICE RIVER

Clear Creek Ridge #2 x	11K22	8000	1/27	50	10.9	7.2	8.9*
Dry Valley Divide	11K8	7800	1/30	40	11.0	6.0	7.0*
Gooseberry Reservoir	11K4	8700	1/27	49	14.9	8.7	11.8*
Indian Canyon x	10K1	9100	1/30	47	11.9	10.2	8.2
Jones Ranch	11K7	7600	1/30	26	6.8	4.0	5.1*
Mammoth R.S.-Ctnwd. Crk.x	11K3	8800	1/27	57	16.4	10.0	12.2*
Mud Creek #2	11K33	8300	1/30	45	11.4	7.4	8.1*

## SAN RAFAEL RIVER

Buck Flat	11K31	9400	1/26	43	10.0	7.2	8.4*
G.B.R.C. Meadows x	11K10	10000	2/1	56	16.3	10.7	14.5*
Gooseberry Reservoir	11K4	8700	1/27	49	14.9	8.7	11.8*
Red Pine Ridge	11K28	9400	1/27	55	13.6	9.8	9.8*
Rush Pond	11K38	9800	1/26	43	8.3	6.8	7.8*
Upper Joe's Valley	11K29	8800	1/27	38	7.3	5.8	5.3*
Wrigley Creek	11K32	9000	1/26	37	7.8	7.0	5.8*

## FREMONT RIVER

Farnsworth Lake x	11L1	9900	1/30	39	11.6	5.8	9.5*
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## ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	1/27	16	3.5	5.5	5.1
Widtsoe-Escalante #2	11M2	9500	1/27	24	5.0	6.4	6.8*
Widtsoe-Escalante #3	11M3	9500	1/27	29	5.8	9.0	9.3*

## VIRGIN RIVER

Duck Creek R.S.	12M4	8560	1/31	32	7.8	13.0	9.0*
Harris Flat R.S.	12M5	7700	1/31	19	4.8	6.2	5.7*
Long Valley Junction	12M6	7500	1/31	14	3.8	Trace	3.2*
Midway Valley x	12M2	9800	1/30	63	17.4	19.9	12.5*
Webster Flat	12M3	9200	1/30	46	11.8	16.7	9.8*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. \* Estimated 1948-62, 15 year average.



# PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT. 1 TO DATE		
		DATE OF READING	MONTHS PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

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## GREAT BASIN DRAINAGE

### UPPER BEAR RIVER (Above Harer, Idaho)

Chalk Creek #2*	8000	1/27	- -	- -	12.79	10.65	120
Chalk Creek #3*	7500	1/27	- -	- -	9.76	8.75	112
Monte Cristo #2	8960	1/30	- -	- -	17.06	18.10	94
Salt River Summit	7900	1/30	6.00	3.65	10.35	11.40	91
Trial Lake*	9800	1/30	7.07	4.50	20.29	15.55	130

### LOWER BEAR RIVER (Below Harer, Idaho)

Dry Bread Pond	8230	1/30	- -	- -	14.84	13.95	106
Garden City Summit	7600	1/26	3.81	3.85	10.72	12.10	89
Klondike Narrows	7400	1/26	5.89	4.80	15.03	15.00	100
Monte Cristo #2	8960	1/30	- -	- -	17.06	18.10	94
Tony Grove R.S.	6250	1/26	3.70	3.71	10.09	11.57	87
Willow Flat	6100	1/27	5.57	- -	14.10	15.40	92

### OGDEN RIVER

Ben Lomond(lower)	5850	1/27	4.36	5.70	15.81	16.30	97
Ben Lomond Trail	6000	1/27	5.20	5.92	16.58	17.05	97
Causey Dam	5500	1/30	2.36	- -	8.45	8.85	95
Dry Bread Pond	8230	1/30	- -	- -	14.84	13.95	106
Monte Cristo #2*	8960	1/30	- -	- -	17.06	18.10	94
Sagebrush Flat	6300	1/30	- -	- -	9.00	9.35	96

### WEBER RIVER

Chalk Creek #2	8000	1/27	- -	- -	12.79	10.65	120
Chalk Creek #3	7500	1/27	- -	- -	9.76	8.75	112
Farmington Guard Sta.(1)	7500	2/1	6.30	5.60a	18.73	19.00a	99
Farmington Rice (1)	7000	2/1	5.75	5.13a	16.37	17.12a	96
Parley's Canyon Smt.	7500	1/28	5.30	4.05	11.56	13.50	86
Silver Lake(Brighton)*(2)	8725	1/31	5.77	5.39a	19.43	18.37a	106
Smith & Morehouse	7600	1/31	4.80	3.60	13.31	11.90	112
Trial Lake*	9800	1/30	7.07	4.50	20.29	15.55	130

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. \*Adjacent drainage.



# PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

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## PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	8000	1/27	- -	- -	14.29	11.00	130
Daniels-Strawberry Smt.	8000	1/31	4.15	3.50	15.67	11.85	132
East Portal Ridge	7800	1/30	4.25	3.50	14.05	11.85	119
Payson Ranger Station	8050	1/26	3.90	3.50	15.55	11.65	133
Soapstone R.S.	7800	1/30	3.87	3.15	11.90	10.50	113
Timpanogos Divide	8200	1/30	8.10	5.53a	28.40	17.26a	165
Trial Lake	9800	1/30	7.07	4.50	20.29	15.55	130

## JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	1/30	2.83	3.10	8.33	11.30	74
Mt. Dell Dam (2)	5500	1/31	3.41	2.15a	9.24	8.26a	112
Parley's Canyon Smt.	7500	1/28	5.30	4.05	11.56	13.50	86
Silver Lake(Brighton)(2)	8725	1/31	5.77	5.39a	19.43	18.37a	106

## SEVIER RIVER ABOVE RICHFIELD

Big Flat	10290	1/31	- -	- -	14.68	11.20	131
Cedar Breaks	10390	No Report	- -	- -	- -	13.55	- -
Duck Creek R.S.	8560	1/31	5.11	3.65	21.09	12.00	176
Webster Flat*	9200	1/30	5.70	4.00	17.23	12.90	134
Widtsoe-Escalante #3	9500	1/27	2.24	1.95	8.00	8.20	98
Widtsoe R.S.	7600	1/27	1.06	0.75a	3.64	3.46a	105
Kimberly Mine	9100	1/30	3.27	3.10	15.97	10.95	146

## SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Farnsworth Lake	9900	1/30	2.71	3.15	11.48	11.15	103
G.B.R.C. Headquarters(1)	8700	2/1	2.82	3.40a	13.74	11.16a	123
G.B.R.C. Meadows(1)	10000	2/1	4.19	3.56a	17.67	12.31a	144
G.B.R.C. Oaks (1)	7655	2/1	2.00	2.14a	10.19	7.73a	132
Gooseberry R.S. (1)	7800	1/30	1.72	1.85	9.46	7.65	124
Gooseberry Reservoir*	8700	1/27	4.34	3.60	15.01	11.75	128
Mammoth R.S. #2*	8600	1/27	4.87	3.55	16.84	11.65	145
Shingle Mill	6200	1/30	2.21	2.55	11.75	9.05	130

## BEAVER RIVER

Beaver Canyon P.H. (2)	7275	1/31	1.63	2.07a	8.20	5.87a	140
Big Flat	10290	1/31	- -	- -	14.68	11.20	131
Merchant Valley	8650	1/26	- -	- -	12.58	- -	- -

## COAL CREEK

Cedar Breaks	10390	No Report	- -	- -	- -	13.55	- -
Webster Flat*	9200	1/30	5.70	4.00	17.23	12.90	134

## PAROWAN CREEK

Tall Poles	8800	1/27	2.62	- -	10.19	- -	- -
Yankee Reservoir	8700	No Report	- -	- -	- -	7.35	- -

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. \*Adjacent drainage.





# PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948-62 AVERAGE	THIS YEAR	1948-62 AVERAGE	PERCENT OF AVERAGE

## COLORADO RIVER DRAINAGE

### UPPER GREEN RIVER IN UTAH (Tributaries above Flaming Gorge)

Burnt Creek	7900	1/30	1.63	- -	6.11	- -	- -
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### GREEN RIVER TRIBUTARIES BETWEEN FLAMING GORGE & DUCHESNE RIVER

Grizzly Ridge	8500	1/30	3.66	- -	10.42	- -	- -
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### DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	1/31	4.15	3.50	15.67	11.85	132
East Portal Ridge*	7800	1/30	4.25	3.50	14.05	11.85	119
Indian Canyon	9100	1/30	3.45	3.35	12.13	10.15	120
Julius Park	9800	1/27	3.43	2.40	11.22	9.80	114
Lakefork Mountain	10500	1/25	- -	- -	10.07	9.15	110
Moon Lake	8150	No Report		1.67a		5.92a	- -
Mosby Mountain	9500	1/27	3.25	- -	11.28	- -	- -
Paradise Park	10100	1/27	4.73	2.85	12.89	10.50	123
Soapstone R.S.*	7800	1/30	3.87	3.15	11.90	10.50	113
Trial Lake*	9800	1/30	7.07	4.50	20.29	15.55	130

### PRICE RIVER

Clear Creek Ridge #2*	8000	1/27	- -	- -	14.29	11.00	130
Gooseberry Reservoir	8700	1/27	4.34	3.60	15.01	11.75	128
Indian Canyon	9100	1/30	3.45	3.35	12.13	10.15	120
Mammoth R.S. #2	8600	1/27	4.87	3.55	16.84	11.65	145
Mud Creek	8300	1/30	3.45	3.15	12.55	10.30	122

### SAN RAFAEL RIVER

Buck Flat	9400	1/26	- -	- -	12.65	10.15	125
G.B.R.C. Meadows*(1)	10000	2/1	4.19	3.56a	17.67	12.31a	144
Gooseberry Reservoir	8700	1/27	4.34	3.60	15.01	11.75	128
Orange Olsen	7300	1/27	- -	- -	9.30	- -	- -
Red Pine Ridge	9400	1/27	- -	- -	16.20	12.10	134

### FREMONT & ESCALANTE RIVERS

Farnsworth Lake*	9900	1/30	2.71	3.15	11.48	11.15	103
Widtsoe-Escalante #3	9500	1/27	2.24	1.95	8.00	8.20	98

### VIRGIN RIVER

Duck Creek R.S.	8560	1/31	5.11	3.65	21.09	12.00	176
Webster Flat	9200	1/30	5.70	4.00	17.23	12.90	134

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. \*Adjacent drainage.





# Agencies Cooperating in Utah Snow Surveys

## U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture  
Soil Conservation Service  
Forest Service  
U. S. Department of Commerce  
Weather Bureau  
U. S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service

## STATE AGENCIES

Utah Agricultural Experiment Station  
Utah Fish and Game Department  
Utah State Engineer  
Bear River Commissioner  
Price River Commissioner  
Provo River Commissioner  
Sevier River Commissioners  
Spanish Fork River Commissioner  
Utah Lake and Jordan River Commissioner  
Utah Water and Power Board

## MUNICIPALITIES

Manti  
Salt Lake City

## ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Emery Canal and Reservoir Company  
Moon Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association

## PRIVATE AGENCIES

Kaiser Steel Corporation

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